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IDH1 Rabbit mAb

Catalog No.: A24133 Recombinant

Basic Information

Observed MW
46kDa/45kDa

Calculated MW
47kDa

Category
Primary antibody

Applications
ELISA,WB,IF/ICC

Cross-Reactivity
Human, Mouse, Rat

CloneNo number
ARC54139

Background

Isocitrate dehydrogenases catalyze the oxidative decarboxylation of isocitrate to 2-oxoglutarate. These enzymes belong to two distinct subclasses, one of which utilizes NAD(+) as the electron acceptor and the other NADP(+). Five isocitrate dehydrogenases have been reported: three NAD(+)-dependent isocitrate dehydrogenases, which localize to the mitochondrial matrix, and two NADP(+)-dependent isocitrate dehydrogenases, one of which is mitochondrial and the other predominantly cytosolic. Each NADP(+)-dependent isozyme is a homodimer. The protein encoded by this gene is the NADP(+)-dependent isocitrate dehydrogenase found in the cytoplasm and peroxisomes. It contains the PTS-1 peroxisomal targeting signal sequence. The presence of this enzyme in peroxisomes suggests roles in the regeneration of NADPH for intraperoxisomal reductions, such as the conversion of 2, 4-dienoyl-CoAs to 3-enoyl-CoAs, as well as in peroxisomal reactions that consume 2-oxoglutarate, namely the alpha-hydroxylation of phytanic acid. The cytoplasmic enzyme serves a significant role in cytoplasmic NADPH production. Alternatively spliced transcript variants encoding the same protein have been found for this gene.

Recommended Dilutions

WB	1:1000 - 1:5000
IF/ICC	1:50 - 1:200

Immunogen Information

Gene ID
3417

Swiss Prot
O75874

Immunogen
A synthetic peptide corresponding to a sequence within amino acids 100-200 of human IDH1 (NP_005887.2).

Synonyms
IDH; IDP; IDCD; IDPC; PICD; HEL-216; HEL-S-26; IDH1

Contact

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Product Information

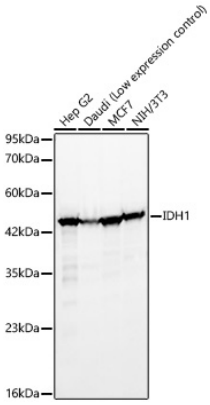
Source
Rabbit

Isotype
IgG

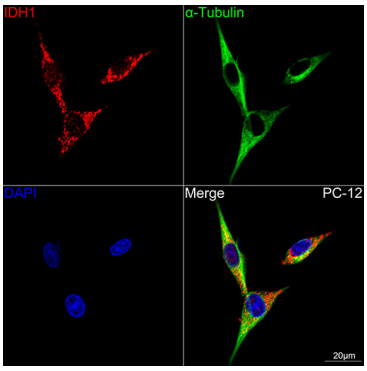
Purification
Affinity purification

Storage
Store at -20℃. Avoid freeze / thaw cycles.
Buffer: PBS with 0.05% proclin300,0.05% BSA,50% glycerol,pH7.3.

Validation Data



Western blot analysis of various lysates using IDH1 Rabbit mAb (A24133) at 1:1000 dilution.
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates / proteins: 25 µg per lane.
Blocking buffer: 3 % nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 15s.



Confocal imaging of PC-12 cells using IDH1 Rabbit mAb (A24133,dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007,dilution 1:500)(Red).The cells were counterstained with α-Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green).DAPI was used for nuclear staining (Blue). Objective: 100x.